Claims

1. A Glyrichin selected from at least one of the following protein family:

1) Human Glyrichin (hGlyrichin) and mouse Glyrichin (mGlyrichin): protein having the amino acid residue sequence of the sequence 1 in the Sequence List or protein with antibacterial activities having sequence 1 in the Sequence List with 1 to 20 amino acid residues of it being deleted, inserted and / or substituted and with 1 to 20 amino acid residues being added to the carboxyl terminal and / or amino terminal of sequence 1;

2) Daniorerio Glyrichin: protein having the amino acid residue sequence of the sequence 3 in the Sequence List or protein with antibacterial activities having sequence 3 in the Sequence List with 1 to 20 amino acid residues of it being deleted, inserted and / or substituted and with 1 to 20 amino acid residues being added to the carboxyl terminal and / or amino terminal of sequence 3;

3) *Anopheles gambiae* Glyrichicn: protein having the amino acid residue sequence of the sequence 4 in the Sequence List or protein with antibacterial activities having sequence 4 in the Sequence List with 1 to 20 amino acid residues of it being deleted, inserted and / or substituted and with 1 to 20 amino acid residues being added to the carboxyl terminal and / or amino terminal of sequence 4;

4) *Drosophila melanogas* Glyrichin: protein having the amino acid residue sequence of the sequence 5 in the Sequence List or protein with antibacterial activities having sequence 5 in the Sequence List with 1 to 20 amino acid residues of it being deleted, inserted and / or substituted and with 1 to 20 amino acid residues being added to the carboxyl terminal and / or amino terminal of sequence 5;

5) *Caenorhabditis elegans* Glyrichin: protein having the amino acid residue sequence of the sequence 6 in the Sequence List or protein with antibacterial activities having sequence 6 in the Sequence List with 1 to 20 amino acid residues of it being deleted, inserted and / or substituted and with 1 to 20 amino acid residues being added to the carboxyl terminal and / or amino terminal of sequence 6;

6) *Caenorhabditis elegans* Glyrichin: protein having the amino acid residue sequence of the sequence 7 in the Sequence List or protein with antibacterial activities having sequence 7 in the Sequence List with 1 to 20 amino acid

residues of it being deleted, inserted and / or substituted and with 1 to 20 amino acid residues being added to the carboxyl terminal and / or amino terminal of sequence 7;

7) *Schizosaccharomyces pombe* Glyrichin: protein having the amino acid residue sequence of the sequence 8 in the Sequence List or protein with antibacterial activities having sequence 8 in the Sequence List with 1 to 20 amino acid residues of it being deleted, inserted and / or substituted and with 1 to 20 amino acid residues being added to the carboxyl terminal and / or amino terminal of sequence 8;

8) *Sacchromyces cerevisiae* Glyrichin: protein having the amino acid residue sequence of the sequence 9 in the Sequence List or protein with antibacterial activities having sequence 9 in the Sequence List with 1 to 20 amino acid residues of it being deleted, inserted and / or substituted and with 1 to 20 amino acid residues being added to the carboxyl terminal and / or amino terminal of sequence 9;

9) *Arabiopsis thaliana* Glyrichin: protein having the amino acid residue sequence of the sequence 10 in the Sequence List or protein with antibacterial activities having sequence 10 in the Sequence List with 1 to 20 amino acid residues of it being deleted, inserted and / or substituted and with 1 to 20 amino acid residues being added to the carboxyl terminal and / or amino terminal of sequence 10;

10) *Plasmodium falciparum 3D7* Glyrichin: protein having the amino acid residue sequence of the sequence 11 in the Sequence List or protein with antibacterial activities having sequence 11 in the Sequence List with 1 to 20 amino acid residues of it being deleted, inserted and / or substituted and with 1 to 20 amino acid residues being added to the carboxyl terminal and / or amino terminal of sequence 11;

11) *Plasmodium yoelii yoelii* Glyrichin: protein having the amino acid residue sequence of the sequence 12 in the Sequence List or protein with antibacterial activities having sequence 12 in the Sequence List with 1 to 20 amino acid residues of it being deleted, inserted and / or substituted and with 1 to 20 amino acid residues being added to the carboxyl terminal and / or amino terminal of sequence 12;

12) *Magnaporthe grisea* Glyrichin: protein having the amino acid residue sequence of the sequence 13 in the Sequence List or protein with antibacterial activities having sequence 13 in the Sequence List with 1 to 20 amino acid

residues of it being deleted, inserted and / or substituted and with 1 to 20 amino acid residues being added to the carboxyl terminal and / or amino terminal of sequence 13;

13) *Neurospora crassa* Glyrichin: protein having the amino acid residue sequence of the sequence 14 in the Sequence List or protein with antibacterial activities having sequence 14 in the Sequence List with 1 to 20 amino acid residues of it being deleted, inserted and / or substituted and with 1 to 20 amino acid residues being added to the carboxyl terminal and / or amino terminal of sequence 14.

2. The Glyrichin of Claim 1, characterizing in that said Glyrichin are hGlyrichin and mGlyrichin, which are proteins having amino acid residues in Sequence 1 in the Sequence List or protein with antibacterial activities having sequence 1 in the Sequence List with 1 to 20 amino acid residues of it being deleted, inserted and / or substituted and with 1 to 20 amino acid residues being added to the carboxyl terminal and / or amino terminal of sequence 1.

3. The Glyrichin of Claim 1 or 2, characterizing in that the number of the amino acid residues deleted, inserted and/or substituted and added at the carboxyl terminal or amino terminal is 1 to 10.

4. The Glyrichin of Claim 3, characterizing in that the number of the amino acid residues deleted, inserted and/or substituted and added at the carboxyl terminal or amino terminal is 1 to 5.

5. The Glyrichin of Claim 4, characterizing in that the number of the amino acid residues deleted, inserted and/or substituted and added at the carboxyl terminal or amino terminal is 1 to 3.

6. A coding gene of the Glyrichin according to any one of Claims 1 to 5.

7. The gene of Claim 6, characterizing in that said Glyrichin is hGlyrichin and its coding gene has DNA sequence in the SEQID No:2 of Sequence List or has >90% homology with the DNA sequence in the SEQID No:2 of the Sequence List, and the DNA sequence of amino acid residue sequence in the coding Sequence List 1 or nucleotide sequences which can hybridize with DNA sequence in the Sequence 2 of

Sequence List under high strict condition.

8. An expression vector containing genes according to Claim 6 or 7.

9. A cell line containing genes according to Claim 6 or 7.

10. An engineering bacteria containing genes according to Claim 6 or 7.

11. An antibacterial use of the Glyrichin according to any one of Claims 1 to 5 as well as the coding gene thereof.

12. The use of Claim 11, characterizing in that the Glyrichin and the coding gene thereof are applied in preparing drugs for prevention and/or treatment of bacterial infectious disease of human or livestock.

13. The use of Claim 11, characterizing in that the Glyrichin and the coding gene thereof are applied in preparing drugs for prevention and/or treatment of potentially bacterial infectious disease of different kinds of creatures.

14. The use of Claim 11, characterizing in that the Glyrichin and the coding gene thereof are applied in producing transgenic creatures that can defend against diseases and pests.

15. The use of Claim 11, characterizing in that the Glyrichin and the coding gene thereof are applied in preparing the derivatives, or antagonists as well as its ligands and antibodies of Glyrichin.